

Listing of the Claims

1-35. (Cancelled)

35. (Currently Amended) An implantable endoprosthesis and radiopaque marker system including:

an implantable endoprosthesis adapted to be disposed in a body lumen; and
a marker having at least one radiopaque portion including a radiopaque material, wherein the marker is removably attached to the implantable endoprosthesis to improve a radiopacity of the endoprosthesis, and is removable from the ~~prosthesis~~ endoprosthesis when the endoprosthesis is *in vivo*.

36. (Previously Added) The system of claim 35 wherein:

the marker has a portion extending away from the endoprosthesis when the marker is so attached thereto, and the marker is removable from the endoprosthesis by pulling said portion away from the endoprosthesis.

37. (Previously Added) The system of claim 36 wherein:

the marker is elongate, and said portion of the marker comprises a free end thereof.

38. (Previously Added) The system of claim 37 further including:

a component at the free end of the marker for facilitating the pulling of the free end away from the endoprosthesis.

39. (Previously Added) The system of claim 38 wherein:

said component is selected from the group consisting of: hooks, knobs, rings, and eyelets.

40. (Previously Added) The system of claim 35 wherein:

the radiopaque material includes an element having an atomic number of at least 22.

41. (Previously Added) The system of claim 40 wherein:

the radiopaque material includes said element in a form selected from the group consisting of: a metal, a metallic alloy including the element, an oxide including the element, and a salt including the element.

42. (Previously Added) The system of claim 40 wherein:

the marker includes a polymer matrix combined with a powder, and the powder includes the element.

43. (Previously Added) The system of claim 35 wherein:

the radiopaque portion of the marker is provided as a coating.

44. (Previously Amended) The system of claim 35 further including:

a delivery device adapted for a delivery of the endoprosthesis to a body lumen and a withdrawal of the delivery device from the body lumen after an implantation of the endoprosthesis within the body lumen; and

wherein the marker further is attached to the delivery device whereby said withdrawal of the delivery device removes the marker from the endoprosthesis.

45. (Previously Added) The system of claim 35 wherein:

a portion of the marker is woven into the endoprosthesis.

46. (Previously Amended) The system of claim 35 wherein:

the marker is formed as a spring, and when removably attached to the implantable endoprosthesis is retained with respect to the endoprosthesis by a spring force.

47. (Previously Added) The system of claim 35 further including:

an adhesive for temporarily securing the marker to the endoprosthesis.

48. (Previously Added) The system of claim 35 further including:

a wire for removably attaching the marker to the endoprosthesis.

49. (Previously Added) The system of claim 48 wherein:

the wire is engaged with the endoprosthesis and the marker in a manner that requires a removal of the wire from the endoprosthesis before removal of the marker from the endoprosthesis.

50. (Previously Added) The system of claim 35 wherein:

the radiopaque material is adapted to be at least partially dispersed from the marker into the body when the endoprosthesis is *in vivo*.

51. (Previously Added) The system of claim 35 wherein:

the marker includes a material selected from the group consisting of: barium sulfate, bismuth trioxide, iodine, iodide, titanium oxide, zirconium oxide, gold, platinum, silver, tantalum, niobium, stainless steel, and combinations thereof.

52. (Previously Added) The system of claim 35 wherein:

the marker includes at least one hollow or porous portion therein adapted to receive the radiopaque material.

53. (Currently Amended) A retrievable radiopaque marker comprising:

an elongate strand having a proximal end, a distal end, an average thickness of from about 20 microns to about 500 microns, wherein the strand is adapted to be removably attached to an implantable endoprosthesis with a segment of the strand extending away from the endoprosthesis, thereby to facilitate a removal of the strand from the endoprosthesis by pulling the strand by said segment away from the endoprosthesis, and wherein the elongate strand has at least one radiopaque portion that includes a radiopaque material and is disposed proximate the endoprosthesis to improve a radiopacity of the endoprosthesis when the strand is so attached thereto, thus to facilitate locating the endoprosthesis *in vivo* by fluoroscopic imaging; and

wherein said segment of the strand comprises a component to facilitate said pulling of the strand, selected from the component group consisting of: hooks, knobs, rings, eyelets, and handles.

54. (Cancelled)

55. (Cancelled)

56. (Currently Amended) A process for modifying an implantable endoprosthesis to temporarily enhance a fluoroscopic visualization of the endoprosthesis during and after an implantation thereof in a body lumen, including:

providing a body implantable endoprosthesis;

providing a marker having at least one radiopaque portion including a radiopaque material; and

prior to a deployment of the endoprosthesis in a body lumen, attaching the marker to the implantable endoprosthesis to improve a radiopacity of the endoprosthesis, and attaching the marker in a manner that facilitates a removal of the marker from the endoprosthesis when the endoprosthesis is *in vivo* after the deployment.

57. (Previously Added) The process of claim 56 wherein:

said marker when so attached has a free end extending away from the endoprosthesis, whereby the marker is removable from the endoprosthesis by pulling the free end away from the endoprosthesis.

58. (Previously Added) The process of claim 56 wherein:

the attaching of the marker to the endoprosthesis comprises using a mode of attachment selected from the group consisting of: weaving the marker into the endoprosthesis; providing the marker as a spring having a spring force and using the spring force to retain the marker attached to the endoprosthesis; and applying the marker to the endoprosthesis using an adhesive.

59. (Previously Added) The process of claim 56 further including:

after attaching the marker to the endoprosthesis, mounting the endoprosthesis releasably to a delivery device.

60. (Previously Added) The process of claim 59 further including:

securing the marker to the delivery device, thereby to enable a removal of the marker from the endoprosthesis by withdrawing the delivery device from the lumen after the deployment and with the endoprosthesis remaining in the lumen.

61. (Previously Cancelled)

62. (Previously Cancelled)

63. (Previously Cancelled)

64. (Previously Added) The system of claim 44 wherein:

the marker is attached to the delivery device by a mode of attachment selected from the group consisting of: mechanical fastening, thermal bonding, and chemical bonding.

65. (Previously Added) The system of claim 44 wherein:

the delivery device includes a tube having a distal region surrounded by the endoprosthesis during said delivery of the endoprosthesis to the body lumen, and the marker is attached to the tube at a location proximal of said distal region.

66. (Previously Added) The marker of claim ~~54~~ 53 wherein:

said component comprises a handle.

67. (Previously Added) The process of claim 60 wherein:

said securing the marker to the delivery device comprises using a mode of attachment selected from the group consisting of: mechanical fastening, thermal bonding, and chemical bonding.

68. (Previously Added) The process of claim 60 wherein:

the delivery device includes a tube, and said mounting the endoprosthesis releasably to a delivery device includes disposing the endoprosthesis in surrounding relation to a distal region of the tube; and

said securing the marker to the delivery device includes attaching the marker to the tube at a location proximal of said distal region.

69. (Previously Cancelled)

70. (Previously Cancelled)

71. (Previously Added) The marker of claim 53 wherein:

said segment comprises the proximal end of the strand.

72. (Previously Added) The marker of claim 53 further comprising:

an implantable endoprosthesis, wherein the strand is so attached to the endoprosthesis.

73. (Previously Added) The marker of claim 72 further including:

a delivery device adapted for a delivery of the endoprosthesis to a body lumen and a withdrawal of the delivery device from the body lumen after an implantation of the endoprosthesis within the body lumen; and

wherein the strand further is attached to the delivery device whereby said withdrawal of the delivery device removes the strand from the endoprosthesis.

74. (Previously Added) The marker of claim 72 further including:

an adhesive for removably attaching the strand to the endoprosthesis.

75. (Previously Added) The marker of claim 53 wherein:

the radiopaque material comprises an element having an atomic number of at least 22, in a form selected from the group consisting of: a metal, a metallic alloy including the element, an oxide including the element, and a salt including the element.

76. (Previously Added) The marker of claim 75 wherein:

the strand includes a polymer matrix combined with a powder, and the powder includes the element.

77. (Previously Added) The marker of claim 53 wherein:

the radiopaque portion of the strand is provided as a coating.

78. (Previously Added) The marker of claim 53 wherein:

the radiopaque material is adapted to be at least partially dispersed from the strand into the body when the strand is *in vivo*.

79. (Previously Added) The marker of claim 78 wherein:

the strand includes a reservoir portion adapted to receive the radiopaque material.

80. (New) An implantable endoprosthesis and radiopaque marker system including:
an implantable endoprosthesis adapted to be disposed in a body lumen; and

a marker having at least one radiopaque portion including a radiopaque material, wherein the marker is removably attached to the implantable endoprosthesis and is removable from the prosthesis when the endoprosthesis is *in vivo*;

wherein the marker is formed as a spring, and when removably attached to the implantable endoprosthesis is retained with respect to the endoprosthesis by a spring force.

81. (New) An implantable endoprosthesis and radiopaque marker system including:
an implantable endoprosthesis adapted to be disposed in a body lumen;

a marker having at least one radiopaque portion including a radiopaque material, wherein the marker is removably attached to the implantable endoprosthesis and is removable from the prosthesis when the endoprosthesis is *in vivo*; and

a wire for removably attaching the marker to the endoprosthesis.

82. (New) The system of claim 81 wherein:

the wire is engaged with the endoprosthesis and the marker in a manner that requires a removal of the wire from the endoprosthesis before removal of the marker from the endoprosthesis.

83. (New) A retrievable radiopaque marker comprising:

an elongate strand having a proximal end, a distal end, an average thickness of from about 20 microns to about 500 microns, wherein the strand is adapted to be removably attached to an implantable endoprosthesis with a segment of the strand extending away from the endoprosthesis, thereby to facilitate a removal of the strand from the endoprosthesis by pulling the strand by said segment away from the endoprosthesis, and wherein the elongate strand has at least one radiopaque portion that includes a radiopaque material and is disposed proximate the endoprosthesis when the strand is so attached thereto, thus to facilitate locating the endoprosthesis *in vivo* by fluoroscopic imaging;

wherein the radiopaque material comprises an element having an atomic number of at least 22; and

wherein the strand includes a polymer matrix combined with a powder, and the powder includes the element.

84. (New) A retrievable radiopaque marker comprising:

an elongate strand having a proximal end, a distal end, an average thickness of from about 20 microns to about 500 microns, wherein the strand is adapted to be removably attached to an implantable endoprosthesis with a segment of the strand extending away from the endoprosthesis, thereby to facilitate a removal of the strand from the endoprosthesis by pulling the strand by said segment away from the endoprosthesis, and wherein the elongate strand has at least one radiopaque portion that includes a radiopaque material and is disposed proximate the endoprosthesis when the strand is so attached thereto, thus to facilitate locating the endoprosthesis *in vivo* by fluoroscopic imaging; and

wherein the radiopaque portion of the strand is provided as a coating.

85. (New) A retrievable radiopaque marker comprising:

an elongate strand having a proximal end, a distal end, an average thickness of from about 20 microns to about 500 microns, wherein the strand is adapted to be removably attached to an implantable endoprosthesis with a segment of the strand extending away from the endoprosthesis, thereby to facilitate a removal of the strand from the endoprosthesis by pulling the strand by said segment away from the endoprosthesis, and wherein the elongate strand has at least one radiopaque portion that includes a radiopaque material and is disposed proximate the endoprosthesis when the strand is so attached thereto, thus to facilitate locating the endoprosthesis *in vivo* by fluoroscopic imaging; and

wherein the radiopaque material is adapted to be at least partially dispersed from the strand into the body when the strand is *in vivo*.

86. (New) A retrievable radiopaque marker comprising:

an elongate strand having a proximal end, a distal end, an average thickness of from about 20 microns to about 500 microns, wherein the strand is adapted to be removably attached to an implantable endoprosthesis with a segment of the strand extending away from the endoprosthesis, thereby to facilitate a removal of the strand from the endoprosthesis by pulling the strand by said segment away from the endoprosthesis, and wherein the elongate strand has at

least one radiopaque portion that includes a radiopaque material and is disposed proximate the endoprosthesis when the strand is so attached thereto, thus to facilitate locating the endoprosthesis *in vivo* by fluoroscopic imaging; and

wherein the strand includes a reservoir portion adapted to receive the radiopaque material.